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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/155,041	03/04/1999	DAVID GEORGE HALLEY	FA/153A	7973

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EXAMINER

BEFUMO, JENNA LEIGH

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 07/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/155,041

Applicant(s)

HALLEY ET AL.

Examiner

Jenna-Leigh Befumo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17, 19-29 and 58-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17, 19-29 and 58-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 19.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The Applicant's Response, filed May 9, 2003, has been received. The pending claims are claims 1 – 17, 19 – 29, and 58 – 61.
2. The Applicant's Response (page 1) is sufficient to overcome the double patenting rejection since US 5,948,707 does not have the same assignee as the current application.
3. The indicated allowability of claim 22 is withdrawn in view of the newly discovered references provided in the Applicant's IDS submitted May 9, 2003. Rejections based on the newly cited references follow.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 – 5, 8 – 10, 15 – 17, 28, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 62-233237.

JP 62-233237 discloses a coated fabric comprising a layer of rigid spherical particles arranged on the surface of a coated film which is on the face of a fabric (claim 1). The spherical particles are made from synthetic resins with a diameter of 1 to 100 microns (page 4, 1st paragraph). Thus, the spheres would have a maximum dimension of 1 to 100 microns and the height of the spheres when placed on the film could be no greater than 1 to 100 microns. The particles cover 7 to 50% of the surface of the film layer (page 4, 2nd paragraph). The film layer is made from polyurethane (page 5, 4th paragraph). The fabric is used to make survival suits or

Art Unit: 1771

raincoats (page 3, 2nd paragraph). Thus, claims 1 – 5, 8 – 10, 15 – 17, 28, and 29 are anticipated by JP 62-233237.

6. Claims 1 – 3, 15 – 17, 19, 28, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 64-45195.

JP 64-45195 discloses moisture-permeable waterproof fabric comprising a layer of dots, lines, or a combination of lines and dots made from a polymeric resin coated on the face of a moisture-permeable waterproof resin film (page 4, 3rd paragraph). The waterproof, breathable film is polyurethane resin or a polytetrafluoroethylene porous film (page 2, last paragraph). The waterproof, breathable film is bonded to a fabric layer on the side opposite the layer of dots (page 2, 2nd paragraph). The dots can be made from various moisture-permeable resins including polyurethane, polyamino urethane, polytetrafluoroethylene or the like (page 5, 2nd paragraph). The dots can be applied in various patterns and as various shapes such as round-shaped, square-shaped and star-shaped shown in Figures 1 – 3 (page 6, 3rd paragraph). The coated dots shouldn't cover more than 50% of the surface area of waterproof, breathable film (page 7, 1st paragraph). The fabric is used to make moisture-permeable waterproof fabric for sports-related clothing (page 2, last paragraph). Therefore, claims 1 – 3, 15 – 17, 19, 28, and 29 are anticipated by JP 64-45195.

7. Claims 1 – 7, 15 – 17, 19, 22, 28, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 3-56541.

JP 3-56541 discloses that known waterproof, moisture permeable fabrics include urethane polymers, polyacrylates ester resin, or tetrafluoroethylene resin coated onto a fabric base (page 3, 3rd paragraph). JP 3-56541 teaches adding a discontinuous coating layer to the microporous

Art Unit: 1771

film layer in the shape of dots (page 4, 2nd paragraph). The dots are made from a polymer material which is moisture permeable such as polyurethane (page 5, 2nd paragraph). The shape and configuration of the dots are not particularly restricted (page 5, last paragraph). The ratio of the dot regions to the total area of the regions where no dots are applied is preferably 1:1 to 4:1 (page 6, 1st paragraph). Finally, the dots have a size ranging from 0.01 to 10 mm² (page 5, last paragraph). Thus, the round dots would have a diameter, or maximum dimension, of 0.1 mm to 3.5 mm, or 100 microns to 3500 microns. Therefore, claims 1 – 7, 15 – 17, 19, 22, 28, and 29.

Claim Rejections - 35 USC § 102/103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 24, 25, 27, 58, and 59 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 62-233237.

The features of JP 62-233237 have been set forth above. Although JP 62-233237 does not explicitly teach the limitations abrasion resistance and water permeability, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. water permeable film layer and protective polymeric spheres) and in the similar production steps (i.e. applying the sphere to the surface of the breathable polyurethane film layer) used to produce the water resistant material. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed limitations would obviously have been provided by the process disclosed by JP 62-233237. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35

Art Unit: 1771

USC 103 in addition to the rejection made above under 35 USC 102. Thus, claims 24, 25, 27, 58, and 59 are rejected.

10. Claims 22, 24, 25, 27, 58, and 59 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 64-45195.

The features of JP 64-45195 have been set forth above. Although JP 64-45195 does not explicitly teach the limitations water permeable, water resistance, abrasion resistance, and elastic modulus, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. polyurethane dots and a moisture-permeable, waterproof coated fabric) and in the similar production steps (i.e. coating the fabric with the polymeric polyurethane dots) used to produce the breathable, waterproof composite. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed limitations would obviously have been provided by the process disclosed by JP 64-45195. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Therefore, claims 22, 24, 25, 27, 58, and 59 are rejected.

11. Claims 22, 24, 25, 27, 58 and 59 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 3-56541.

The features of JP 3-56541 have been set forth above. Although JP 3-56541 does not explicitly teach the limitations water permeability, abrasion resistance, and water resistance, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. a waterproof, breathable composite fabric and polymeric dots) and in the similar production steps (i.e. applying the polymeric dots to

Art Unit: 1771

the breathable film layer of the composite material) used to produce the breathable, waterproof fabric. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed limitation would obviously have been provided by the process disclosed by JP 3-56541. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Therefore, claims 22, 24, 25, 27, 58 and 59 are rejected.

Claim Rejections - 35 USC § 103

12. Claims 1 – 17, 19, 24 – 29, and 58 – 59 are rejected under 35 U.S.C. 103(a) as obvious over JP 5-33335 in view of JP 64-45195.

JP 5-33335 discloses a waterproof material that comprises a waterproof polyurethane layer on the surface of a fabric, and a discontinuous layer of vinyl chloride resin indentions/projections on the surface of the waterproof layer (claim 1). The indentions/projections have a height of 0.03 to 0.3mm and cover no more than 50% of the surface area of the waterproof layer (claim 1). The waterproof material can be used as apparel where the projections/indentions are adjacent to the skin and the material possesses moisture permeability (page 2, paragraph 5). The moisture permeable, waterproof layer is made a microporous polyurethane film (page 5, 1st paragraph).

While JP 5-33335 teaches that the waterproof layer is covered with projections/indentions, JP 5-33335 fails to teach that the indentions are in the form of spherical dots. The features of JP 64-45195 have been set forth above. JP 64-45195 teaches that the discontinuous coating layer can be in the form of spherical dots or lines and other various shapes. Therefore, it would have been obvious to one of ordinary skill in the art to produce spherical dots

Art Unit: 1771

as taught by JP 64-45195, to coat the waterproof layer taught by JP 5-33335 since JP 64-45195 teaches various shapes can be used to coat the waterproof layer. Further, such a modification would have involved a mere change in the shape of a components. A change in the shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 357 F.2nd 669, 149 USPQ 47 (CCPA 1966). Therefore, claims 1 – 3, 15 – 17, 28, and 29 are rejected.

Additionally, it would have been obvious to one having ordinary skill in the art at the time the invention was made to chose the claimed height, maximum dimension, and dot spacing claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). One of ordinary skill of the art would be motivated to space and size the dots so that the dots will be uniformly spaced on the surface of the waterproof film, without covering too much of the film so that the fabric is no longer breathable or flexible. Therefore, claims 4 – 14 and 26 are rejected.

Although the limitations of water permeability, abrasion resistance, and water resistance are not explicitly taught by JP 5-33335 or JP 64-45195, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. a waterproof, breathable composite fabric and polymeric dots) and in the similar production steps (i.e. applying the polymeric dots to the breathable film layer of the composite material) used to produce the breathable, waterproof fabric. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. Therefore, claims 24, 25, 27, 58 and 59 are rejected.

Art Unit: 1771

Further, JP 5-33335 fails to teach using polytetrafluoroethylene as the breathable, waterproof film layer. JP 64-45195 discloses that polytetrafluoroethylene or polyurethane can be used as the breathable, waterproof film layer. Therefore, it would have been obvious to one of ordinary skill in the art substitute the polytetrafluoroethylene breathable layer for the polyurethane layer since JP 64-45195 teaches that polytetrafluoroethylene can be used instead of polyurethane to produce a breathable coating and the materials are recognized equivalents.

Therefore, claim 19 is rejected.

13. Claims 6, 7, 11 – 14, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 62-233237.

Claims 4 – 14 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over 64-45195.

Claims 8 – 14 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3-56541.

The features of JP 62-233237, JP 64-45195, and JP 3-56541 have been set forth above. While these references teach that discontinuous layers can be coated onto a waterproof, breathable film, these references fail to teach the specific size and configuration of the discontinuous dots applied to the surface. However, these references suggest that the size, shape and configurations can be modified to form various patterns. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the claimed height, maximum dimension, and dot spacing claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233

Art Unit: 1771

(CCPA 1955). One of ordinary skill of the art would be motivated to space and size the dots so that the dots will be uniformly spaced on the surface of the waterproof film, without covering too much of the film so that the fabric is no longer breathable or flexible.

14. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 64-45195 in view of Burleigh (4,613,544).

Claims 20, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3-56541 in view of Burleigh.

The features of JP 64-45195 and JP 3-56541 have been set forth above. Both references disclose that polytetrafluoroethylene can be used as the waterproof coating on the fabric layer, however these references fail to teach that the polytetrafluoroethylene includes a hydrophilic coating. Burleigh is drawn to waterproof, moisture-vapor permeable sheet material. Burleigh discloses that various waterproof materials are known which allow water to pass through the fabric or aren't breathable including polyurethane and polytetrafluoroethylene (column 1, lines 13 – 35). Burleigh discloses a layer comprising a hydrophobic microporous film wherein the pores are filled with a hydrophilic material produces waterproof fabric which is also very moisture-vapor permeable (column 2, lines 10 – 38). The composite material has improved hand or drape and durability (column 2, lines 7 – 9). The microporous material is expanded polytetrafluoroethylene (column 4, lines 44 – 49). The hydrophilic material which fills the pores is made from polyurethane (column 5, lines 55 – 67). The composite forms a layer which has a continuous non-porous surface. Hence, the hydrophilic material will be on the surface of the composite layer. Thus, it would have been obvious to one of ordinary skill in the art to substitute the waterproof composite layer taught by Burleigh for the polytetrafluoroethylene layer taught by

Art Unit: 1771

JP 64-45195 or JP 3-45195 since Burleigh discloses that the material is very breathable while have excellent drape and durability.

15. Claims 60 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 62-233237, JP 64-45195, JP 3-56541, or JP 5-33335 in view of Siniscalchi (4,775,581).

The features of JP 62-233237, JP 64-45195, JP 3-56541, and JP 5-33335 have been set forth above. While, these references disclose that various garments can be made from the waterproof fabrics, these references fail to teach how the seams are produced. Siniscalchi is drawn to garments made from waterproof fabrics. Siniscalchi discloses that while fabrics are sewn together via stitching, the stitches produce areas where water can infiltrate into the fabric in waterproof garments (column 1, lines 15 – 20). Therefore, Siniscalchi teaches adding a waterproof tape to the areas of the fabrics which have been stitched to prevent water from passing through into the interior of the fabric (column 3, lines 5 – 14). The tape also produces increased strength at the seams (column 1, lines 40 – 43). Therefore, it would have been obvious to one of ordinary skill in the art to form seams as taught by Siniscalchi in the garments produced from the composite fabrics taught by JP 62-233237, JP 64-45195, JP 3-56541, or JP 5-33335 since the seams would have increased strength and be watertight. Thus claims 60 and 61 are rejected.

Conclusion

16. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on May 9, 2003 prompted the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 1771

§ 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (703) 605-1170. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Jenna-Leigh Befumo
June 25, 2003



CHERYL A. JUSKA
PRIMARY EXAMINER